WHAT IS CLAIMED

1. An introducer device, comprising:

a guide unit having a range of motion;

a holder assembly capable of receiving attachment of a primary medical device, the holder assembly travelling along the range of motion of the guide unit; and

an advancer located remote from the guide unit; and

an MR compatible cable that operatively couples the advancer to the holder assembly, wherein input from the advancer controls motion of the holder assembly along the range of motion.

2. The introducer device of claim 1 wherein the guide unit comprises a slide tower and the range of motion is linear along a slide axis of the slide tower.

3. The introducer device of claim 1 wherein the advancer includes a thumb wheel that translates rotation of the thumb wheel about a thumb wheel axis into motion of the holder assembly along the range of motion.

4. The introducer device of claim 3 further comprising an indicator scale coupled to the thumb wheel wherein the indicator scale indicates the position of the holder assembly within the range of motion.

5. The introducer device of claim 1 further comprising a body, the body having a hole through it, wherein the guide unit is coupled to the body and the primary medical device passes through the hole in the body as guided by the holder assembly along the range of motion.

6. The introducer device of claim 5 further comprising a centering plate adjustably attached to the body, the centering plate comprising:

at least two walls partially defining an opening in the plate;

wherein the centering plate may be adjusted such that the walls engage the primary medical device and center the primary medical device.

7. The introducer device of claim 1 further comprising a locking device wherein the locking device must be actuated before any motion of the holder assembly is permitted.

8. The introducer device of claim 7 wherein the locking device may further be selectively actuated in either a freewheeling mode or a discrete step mode.

9. The introducer device of claim 8 wherein the discrete step mode facilitates motion of the holder assembly in distance increments of one-half millimeter.

10. The introducer device of claim 1, further comprising a first frameless locating attachment coupled to the holder assembly.

11. The introducer device of claim 10, wherein the first frameless locating attachment includes a plurality of infrared (IR) reflective spheres.

12. The introducer device of claim 10, wherein the first frameless locating attachment includes a plurality of infrared (IR) generating LED devices.

13. A calibrated introducer device, comprising:
a guide unit having a range of motion;
a holder assembly capable of receiving attachment of a primary medical device, the holder assembly travelling along the range of motion of the guide unit;
an advancer located remote from the guide unit;
an MR compatible cable that operatively couples the advancer to the holder assembly, wherein input from the advancer controls motion of the holder assembly along the range of motion;

a local position sensor mounted to the guide unit, wherein a position of the holder assembly along the range of motion is sensed; and

a remote user interface, operatively coupled to the local position sensor, wherein the remote user interface displays the position of the holder assembly along the range of motion.

14. The calibrated introducer device of claim 13, wherein the MR compatible cable is a push-pull cable.

15. The calibrated introducer device of claim 13 wherein the local position sensor includes a potentiometer.

16. The calibrated introducer device of claim 13 wherein the local position sensor includes an encoder.

17. An introduction system, comprising:

a trajectory guide device;

an introducer device attached to the trajectory guide, comprising:

a guide unit having a range of motion;

a holder assembly capable of receiving attachment of a primary medical device, the holder assembly travelling along the range of motion of the guide unit;

an advancer located remote from the guide unit;

an MR compatible cable that operatively couples the advancer to the holder assembly, wherein input from the advancer controls motion of the holder assembly along the range of motion; and

a primary medical device attached to the holder assembly.

18. The introduction system of claim 17, wherein the introducer device further comprises:

a local position sensor mounted to the guide unit, wherein a position of the holder assembly along the range of motion is sensed; and

a remote user interface, operatively coupled to the local position sensor, wherein the remote user interface displays the position of the holder assembly along the range of motion.

19. The introduction system of claim 17, further comprising:

at least one device mounted coil that determines a holder assembly reference frame; and

a user interface that detects the holder assembly reference frame and an operating surface reference frame and determines a relative position difference between the two reference frames.

20. The introduction system of claim 17, further comprising:

a first frameless locating attachment attached to the holder assembly;

a second frameless locating attachment attached to a surface that a patient is attached to; and

an imaging device that detects the first and second frameless locating attachments and references the position of the first frameless locating attachment relative to the second frameless locating attachment.

21. The introduction system of claim 20, wherein the first and second frameless locating attachments includes a plurality of infrared (IR) reflective spheres.

22. The introduction system of claim 20, wherein the first and second frameless locating attachments includes a plurality of infrared (IR) generating LED devices.

23. The introduction system of claim 20, wherein the imaging device includes an IR sensitive camera.

24. An introduction system comprising:

a trajectory guide device, wherein the trajectory guide device is attached directly to a patient;

an introducer device attached to the trajectory guide, comprising:

a guide unit having a range of motion;

a holder assembly capable of receiving attachment of a primary medical device, the holder assembly travelling along the range of motion of the guide unit; and

an advancer coupled locally to the guide unit; and

a primary medical device attached to the holder assembly.

25. The introduction system of claim 24, wherein the manual advancer includes an adjusting wheel that translates rotary motion of the adjusting wheel about an adjusting wheel axis of rotation into motion of the holder assembly along the range of motion.

26. The introduction system of claim 24, wherein the range of motion is linear.

27. The introduction system of claim 24, wherein the introducer device further comprises:

a local position sensor mounted to the guide unit, wherein a position of the holder assembly along the range of motion is sensed; and

a remote user interface, operatively coupled to the local position sensor, wherein the remote user interface displays the position of the holder assembly along the range of motion.

28. The introduction system of claim 27, wherein the local position sensor includes a potentiometer.

29. The introduction system of claim 27, wherein the local position sensor includes an encoder.

30. A method of introducing a primary medical device into a patient, comprising:

attaching a guide unit to a patient, the guide unit having a range of motion;
attaching the primary medical device to a holder assembly, the holder assembly travelling along the range of motion of the guide unit;
coupling an MR compatible cable to the holder assembly;
coupling the MR compatible cable to an advancer, the advancer being located remote from the guide unit; and
operating the advancer such that the MR compatible cable translates operation of the advancer into motion of the holder assembly along the range of motion of the guide unit.

31. The method of introducing a primary medical device into a patient of claim 30 wherein operating the advancer includes rotating a thumb wheel.

32. The method of introducing a primary medical device into a patient of claim 30 wherein attaching a guide unit to a patient comprises:
attaching a trajectory guide to the patient;
aligning the trajectory guide; and
attaching the guide unit to the trajectory guide.